UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/723,586	11/24/2003	Michael D. Ellis	UV-67 Cont.	7566	
75563 ROPES & GRA	7590 03/15/201 Y LLP	0	EXAMINER		
	KETING 39/361	TAYLOR, JOSHUA D			
NEW YORK, N	OF THE AMERICAS NY 10036-8704	•	ART UNIT	PAPER NUMBER	
			2426		
			MAIL DATE	DELIVERY MODE	
			03/15/2010	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)				
Office Action Summary		10/723,586	ELLIS ET AL.				
		Examiner	Art Unit				
		JOSHUA TAYLOR	2426				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠	Responsive to communication(s) filed on <u>15 De</u>	ocember 2000					
•							
3)□	, _						
<i>ا</i> ل	- ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
 4) Claim(s) 200-219 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 200-219 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 							
Applicati	on Papers						
9)	The specification is objected to by the Examine	r.					
10)🛛	The drawing(s) filed on <u>24 November 2003</u> is/ai	re: a)⊠ accepted or b)⊡ object	ed to by the Exam	niner.			
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority ι	ınder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
Attachmen		4) Intonious Summary	(PTO_413)				
2) Notic 3) Infori	e of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te				

Application/Control Number: 10/723,586 Page 2

Art Unit: 2426

DETAILED ACTION

1. This Office Action is in response to a RESPONSE entered on December 15, 2009 for the patent application 10/723,586 filed on November 24, 2003.

2. The Office Action of June 15, 2009 is fully incorporated into this Final Office Action by reference.

Status of Claims

3. Claims 200-219 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 200-202, 206-212 and 216-219 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banker et al. (Pat. No.: US 5,485,221) in view of Windrem et al. (Pat. No.: US 5,754,730).

Examiner's Note: The following claims are rejected using Banker, which incorporates by reference Lett et al. (Pat. No.: US 5,592,551). For ease of reference, Examiner's citations will refer to the Banker text unless otherwise indicated. ¶ 12. below applies.

Art Unit: 2426

Regarding claims 200 and 210, Banker discloses user television equipment and a method that allows a user to watch one television program on a viewing device while simultaneously recording another television program (column 9, lines 33-51), said user television equipment comprising: a storage device (column 16, line 34. A VCR is a storage device.); a first tuner (Fig. 2, element 100) coupled to said viewing device (Fig. 1A, elements 14 and 20, column 5, lines 53-67. The subscriber terminal 14, shown in detail in Fig. 2, is coupled to the television.); a second tuner coupled to said storage device (column 9, lines 33-51 and column 16, lines 23-38. The VCR can record programming from the second tuner, and therefore must be coupled to it.). In the main body of the disclose of Banker, Banker discloses the subscriber terminal having an interactive user interface with an on-screen display (column 11, lines 10-25). However, in the Lett patent, which is incorporated by reference into the Banker patent (column 7, lines 8-12), there is a more in-depth disclose of interactive program guides. Thus, Banker further discloses an interactive television program guide implemented on user television equipment (Lett, Abstract, Figs. 2 and 3), said interactive television program guide configured to: cause said viewing device to display a program guide display (Lett, Fig. 4B); receive a user selection to watch a first television program indicated on said program guide display (Lett, column 11, line 67 – column 12, line 8); receive a user selection to record a second television program indicated on said program guide display (Lett, column 3, lines 1-8); cause said first tuner to tune to a channel, corresponding to said first television program in order to cause said first television program to be displayed by said viewing device (Lett, column 12, lines 19-27); and cause said second tuner to tune to a channel corresponding to said second television program in order to cause said second television program to be

Art Unit: 2426

recorded by said storage device (Lett, column 12, lines 19-27), wherein broadcast times of said first television program and said second television program overlap such that said first television program is displayed by said viewing device at the same time that said second television program is recorded by said storage device (column 9, lines 33-51 and column 16,

Page 4

lines 23-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Banker to produce an electronic program guide from which the user could select to view one program while recording another program.

Banker does not explicitly disclose wherein the storage device which records the second television program is **a digital storage device.** However, in analogous art, Windrem discloses that a digital video recorder (DVR) can be used to record television content (Fig. 1, column 2, lines 13-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the VCR of Banker for the DVR of Windrem.

Regarding claims 201 and 211, the combined teachings of Banker and Windrem disclose the user television equipment and method of claims 200 and 210, and Banker further discloses wherein said interactive television program guide is further configured to use said second tuner to perform a function other than program recording (column 9, lines 33-51 and column 16, lines 23-38. The other tuner may be used for a picture-in-picture display.).

Regarding claims 202 and 212, the combined teachings of Banker and Windrem disclose the user television equipment and method of claims 201 and 211, and Banker further discloses wherein said function other than program recording is selected from the group consisting of providing a picture-in-picture signal, collecting program guide data, browsing

Art Unit: 2426

Page 5

the Internet, and playing a music channel (column 9, lines 33-51 and column 16, lines 23-38. The other tuner may be used for a picture-in-picture display.).

Regarding claims 206 and 216, the combined teachings of Banker and Windrem disclose the user television equipment and method of claims 200 and 210, and Banker discloses further comprising switching circuitry having a first input coupled to said first tuner, a second input coupled to said second tuner, a first output coupled to said viewing device, and a second output coupled to said storage device (Fig. 1A, elements 14, 18 and 20), wherein said interactive television program guide is further configured to cause said switching circuitry to dynamically couple said first tuner to said viewing device and to dynamically couple said second tuner to said storage device (column 9, lines 33-51 and column 16, lines 23-38. The VCR can record programming from the second tuner, and therefore must be coupled to it.). Windrem discloses the digital recording device (Fig. 1, column 2, lines 13-27), and therefore these claims are rejected on the same grounds as claim 200.

Regarding claims 207 and 217, the combined teachings of Banker and Windrem disclose the user television equipment and method of claims 200 and 210, and Banker further discloses wherein said interactive television program guide is configured to cause said viewing device to display a first program listing corresponding to said first television program and to display a second program listing corresponding to said second television program (Lett, Figs. 4A-6. Lett discloses multiple programs, any of which could be the first and second programs.). These claims are rejected on the same grounds as claim 200.

Regarding claims 208 and 218, the combined teachings of Banker and Windrem disclose the user television equipment and method of claims 207 and 217, and Banker further

discloses wherein said interactive television program guide is configured to receive said user selection to watch said first television program from a remote control when said first program listing is highlighted by a cursor and to receive said user selection to record said second television program from said remote control when said second program listing is highlighted by a cursor (Fig. 5, column 11, line 42 – column 12, line 8). These claims are rejected on the same grounds as claim 200.

Regarding claims 209 and 219, the combined teachings of Banker and Windrem disclose the user television equipment and method of claims 200 and 210, and Banker further discloses wherein said first tuner and said second tuner are included in a single set-top box (Fig. 2, column 9, lines 33-51. Banker states that subscriber terminal 14 can have multiple tuners, although they are not drawn in Fig. 2.).

5. Claims 203 and 213 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banker et al. (Pat. No.: US 5,485,221) in view of Windrem et al. (Pat. No.: US 5,754,730), and further in view of Macrae et al. (Pat. No.: US 6,052,145).

Regarding claims 203 and 213, the combined teachings of Banker and Windrem disclose the user television equipment and method of claims 201 and 211, but do not disclose wherein said interactive television program guide is configured to cause said second tuner to tune to said channel corresponding to said second television program when said second television program is about to begin regardless of whether said second tuner is being used to perform said function other than program recording when sale second television program is about

to begin. However, in analogous art, Macrae discloses that a scheduled recording can be initiated by having the set-top box automatically change the channel, regardless of what channel is currently being tuned (Fig. 21, column 17, lines 21-37. Note: There appears to be a typographical error in this section of Macrae, as Fig. 24 is cited, but Fig. 21 is clearly being referring to.). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Banker and Windrem to allow for the guide to tune to the appropriate channel as it had been programmed to do. This would have produced predictable and desirable results, in that the program which the user scheduled to record would be recorded even if the tuner was tuned to a different channel when the recording was to start.

6. Claims 204 and 214 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banker et al. (Pat. No.: US 5,485,221) in view of Windrem et al. (Pat. No.: US 5,754,730), and further in view of Ellis et al. (Pat. No.: US 5,986,650).

Regarding claims 204 and 214, the combined teachings of Banker and Windrem disclose the user television equipment and method of claims 201 and 211, but do not disclose wherein said interactive television program guide is further configured to cause said viewing device to display an option to cancel recording of said second television program when said second tuner is being used to perform said function other than program recording at the time said second television program is about to begin. However, in analogous art, Ellis discloses displaying a message just before a recording is scheduled to begin giving the user the option to cancel the recording (column 14, lines 27-36). Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Banker and Windrem to allow for the user to be reminded before the recording begins of the approaching start of recording. This would have produced predictable and desirable results, as at would give the user the option of changing their mind if they not longer desired to record the scheduled program.

7. Claims 205 and 215 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banker et al. (Pat. No.: US 5,485,221) in view of Windrem et al. (Pat. No.: US 5,754,730), and further in view of Tsumori et al. (Pat. No.: US 5,650,827).

Regarding claims 205 and 215, the combined teachings of Banker and Windrem disclose the user television equipment and method of claims 201 and 211, but do not disclose wherein said interactive television program guide is further configured to cause said viewing device to display an option to cancel recording of said second television program when said function other than program recording is initiated during said recording of said second television programs. However, in analogous art, Tsumori discloses that a user can select an option so that a channel is locked during recording, so that the channel cannot be inadvertently changed during recording (Fig. 4, element 36b3, Fig. 8a, element 36b33, column 16, lines 18-36), which gives the user the option of canceling a recording by turning the channel lock off. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Banker and Windrem to allow the user an option to cancel the recording after it had started. This would have produced predictable and desirable results, as at would give

the user the option of changing their mind if they not longer desired to continue to record the scheduled program.

Page 9

Response to Arguments

8. Applicant's arguments filed December 15, 2009 have been fully considered but they are not persuasive.

Concerning Applicant's arguments on page 4 concerning claim 200:

Although Banker states that simultaneous watch and record and picture-in-picture capabilities could be provided using "multiple tuners," there is no enabling discussion of how such tuners would be controlled as is required by applicants' claims. (Banker, col. 9, lines 37-39). In the Office Action at page 9, the Examiner states that only the mere disclosure of multiple tuners in Banker is needed. M.P.E.P. § 2121, however, requires that prior art be enabling. Banker instead only mentions that multiple tuners may be provided, without any further details. (Banker, col. 9, lines 37-40). Even if Banker's multiple tuners were operable, which is not conceded, Lett does not describe how multiple tuners could be controlled. Like Banker, Lett briefly mentions using multiple tuners for picture-in-picture services or watch/record modes, but also fails to disclose how multiple tuners would operate. (Lett, col. 7, lines 26-28). In particular, Lett fails to disclose that multiple tuners could be controlled by an interactive guide.

Examiner's Response:

Examiner states that the combined teaching of Banker (and Lett) in view of Windrem disclose the user television equipment of claim 1, and specifically that Banker and Lett are enabling. M.P.E.P §2121, section III. states "A prior art reference provides an enabling disclosure and thus anticipates a claimed invention if the reference describes the claimed invention in sufficient detail *to enable a person of ordinary skill in the art to carry out the*

claimed invention (emphasis added); "proof of efficacy is not required for a prior art reference to be enabling for purposes of anticipation." Impax Labs. Inc. v. Aventis Pharm. Inc., 468 F.3d 1366, 1383, 81 USPQ2d 1001, 1013 (Fed. Cir. 2006)," and further states "[t]he disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation (emphasis added)." It is Examiner's position that one of ordinary skill in the art at the time of the invention could have taken the disclosure of Banker (and Lett) and produced an operable second tuner without undue experimentation. The knowledge required to control a single tuner is imminently relevant to the knowledge required to control multiple tuners, especially when Banker discloses a) that a single tuner can be used to watch a television program, b) that a single tuner can be used to record a television program, and c) that multiple tuners may be provided for tuning to more than one television channel simultaneously, for the purpose of simultaneously watching and recording (col. 9, ln. 37-39).

Concerning Applicant's arguments on pages 4-5 concerning claim 200:

Lett and Banker both describe a data port 140 which may be used by a microprocessor for communication and control of other auxiliary devices. (Lett, col. 9, lines 59-61, Banker, col. 12, lines 5-7.) Banker's single discussion of providing simultaneous viewing and recording uses its data port to combine two separate subscriber terminals in a master/slave relationship. (Banker, col. 16, lines 24-25.) Lett and Banker both state that the data port "may accommodate an IR blaster for VCR control via an on-screen menu, an additional subscriber terminal for dual tuner operation, or connection to a digital video subscriber terminal." (Lett, col. 9, lines 61-65, Banker, col. 12, lines 7-10.) Notably, Lett and Banker do not disclose how to control additional subscriber terminals for dual tuner operation via the data port. In particular, neither Lett nor Banker disclose using an interactive guide to control the additional subscriber terminals for dual tuner operation. In fact, Banker fails to disclose controlling any tuner with an interactive guide and

Art Unit: 2426

Lett only discloses controlling a single tuner with an interactive guide. There is simply no disclosure in Banker or Lett of how an interactive guide could control multiple tuners. Therefore, a combined Lett and Banker system fails to disclose an interactive television program guide that is configured to perform at least the following steps specified in claim 200:

cause said first tuner to tune to a channel corresponding to said first television program in order to cause said first television program to be displayed by said viewing device; and

cause said second tuner to tune to a channel corresponding to said second television program in order to cause said second television program to be recorded by said digital storage device,

wherein broadcast times of said first television program and said second television program overlap such that said first television program is displayed by said viewing device at the same time that said second television program is recorded by said digital storage device.

Examiner's Response:

Concerning Lett failing to disclose that multiple tuners could be controlled by an interactive guide, in col. 3, ln. 1-8, Lett discloses that a "user may select programs for *watching or recording* directly from the electronic program guide (emphasis added)," as well as disclosing that multiple tuners may be provided for tuning to more than one television channel simultaneously, for the purpose of simultaneously watching and recording (col. 7, ln. 26-28). It is Examiner's position that one of ordinary skill in the art at the time of the invention could have taken the disclosure of Lett and produced an operable second tuner, controlled from an interactive guide, without undue experimentation, for the same reasons stated above in response to Applicant's previous arguments.

Concerning Applicant's arguments on page 5 concerning claim 200:

Further distinguishing claim 200 from the combination of Lett and Banker is the digital storage device element. In the Office Action at page 4, the Examiner acknowledges that Banker does not explicitly recite a digital storage device. To fill this deficiency, the Examiner states that Windrem is analogous art which could be used for recording television content as a substitute for Banker's VCR. Applicants respectfully disagree. Windrem describes cache management and disk utilization for a digital video recorder. (Windrem (col. I, lines 46-47. There is no disclosure in Windrem that suggests that it could be used as a substitute for a VCR. Indeed, the Examiner has failed to state any motivation for combining Windrem with Banker and Lett. Windrem's system is described as being for random access disk drive which provide random access to video data. (Windrem, col. I, lines 16-20.) Windrem contrasts this with a tape recorder which allow only sequential access. (Windrem, col. I., lines 18-19.) Banker and Lett disclose a VCR as their recording device. There is no disclosure in Banker and Lett of anything other than a standard single tape recorder that provides recording functionality. As such, a person of skill in the art would not read Windrem's caching techniques and multiple video inputs and outputs as being relevant to a VCR that records video on a tape, which does not have caching or random access functionality. Applicants submit that such video data cache management systems would not have been an obvious substitution for a VCR at the time of the invention. Thus, the combination of Lett, Banker and Windrem do not disclose all of the elements of claim 200.

Examiner's Response:

Examiner disagrees with Applicant's assessment that the DVR of Windrem could not be a substitute for a VCR. Applicant admits that Windrem states the advantages of a DVR over a tape recorder (a VCR is a tape recorder), in that a DVR allows for random access to video data, while a tape recorder only allows for sequential access (col. 1, ln. 16-20). This advantage would be the motivation for one of ordinary skill in the art at the time of the invention to combine the disclosure of Banker (and Lett) with the digital video recorder of Windrem in place of the video cassette recorder of Banker.

Application/Control Number: 10/723,586 Page 13

Art Unit: 2426

Examination Considerations

- 9. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, 145-48; p 2100-9, c 1, 11-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.
- 10. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.
- 11. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

12. Examiner's Opinion: ¶¶ 9.-11. apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Conclusion

- 13. Claims 200-219 are rejected.
- 14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA TAYLOR whose telephone number is (571) 270-3755. The examiner can normally be reached on 8am-5pm, M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hirl can be reached on (571) 272-3685. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/723,586 Page 15

Art Unit: 2426

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Josh Taylor/ Examiner, Art Unit 2426

/Joseph P. Hirl/ Supervisory Patent Examiner, Art Unit 2426 March 11, 2010